

Work Order ID 154780

Wednesday, December 21, 2016 11:55:01 A

154780

Page 1

Item ID: D3847-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Wearpad

Start Date: 12/16/2016 Start Qty: 10.00

10

Cust Item ID:

Required Date: 12/21/2016 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: DAS 21 Date: DEC 21 2016 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3847	D

100

0.00

100

Waterjet

Memo

0.10

FLOW CNC Waterjet

1-Cut as per Dwg D3847

Dwg Rev: DProg Rev: D

2-Deburr if necessary

(10)

Dec 16 / 12 / 22

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.02

Quality Control

(10)

Dec 16 / 12 / 22

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
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Design ☐		Operator ☐		Bending ☐		Set-up ☐		Folio/Program ☐	Outside Dimensions ☐																
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Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____																					
Misidentified ☐		Past Due ☐																							

Work Order ID 154780***154780***

Page 2

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Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Wearpad

Start Date: 12/16/2016 Start Qty: 10.00

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Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.03

Quality Control

(10)

16-12-23

DAS
9
9-89

130

Operation

0.03

130

Brake NC

Memo

0.13

Brake NC

Form as per dwg

DAS
30
9-89

(10)

JAN 11 2017

140

QC5- Inspect part completeness to step on W/O

0.00

140

QC

Memo

0.03

Quality Control

10

DAS
38
9-89

JAN 12 2017

DQA: _____ Date: _____



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Work Order ID 154780

Wednesday, December 21, 2016 11:55:01 A

154780

Page 3

Item ID: D3847-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Wearpad
 Start Date: 12/16/2016 Start Qty: 10.00 ***10*** Cust Item ID:
 Required Date: 12/21/2016 Req'd Qty: 10.00 ***10*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Weld per dwg & QSI004 4.5	0.00							
150						<u>12</u>	<u>02</u>	<u>17-1-21</u>	
autoweld 1	Memo	0.13							
Automated Welding 1	****Use jig DT10220 base. DT10218 cover and proper dowel pins to locate. Use program D3847-1 all in program manager module.****								
	Weld hardcoat as per dwg A/R 8259 Batch: <u>1175462</u>								
160	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-80
160						<u>12</u>			
QC	Memo	0.03							
Quality Control									JAN 31 2017
170	QC10- Inspect visual per QSI004- ground welds	0.00							DAS 38 9-80
170						<u>12</u>			
QC	Memo	0.03							
Quality Control									FEB 01 2017 FEB 01 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

154780

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N900040100

Setup Start *NS1*

Stop *NS2*

10

Cust Item ID:

Start Date: 12/16/2016 **Start Qty:** 10.00

Required Date: 12/21/2016 **Req'd Qty:** 10.00

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Customer:

Reference:

Run Start *NR1*

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Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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0.00

193

0.40

HandFinish

Hand Finishing

Memo

APPLY TEXTURE COATING ON TOP CONCAVE SURFACE AS PER DWG

TEXTURE COATING BATCH: 136470

196

0.00

196

0.02

QC

Quality Control

QC3- Inspect Part Finish

Memo

200

0.00

200

0.02

Packaging

Packaging

Identify as per dwg & Stock Location: _____

Memo

LOCATION : FP001

DQA: _____ Date: _____



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Page 5

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Revision ID:

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Run Start ***NR1***

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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	QC21- Final Inspection - Work Order Release	0.00							
210									
QC	Memo	0.17							
Quality Control									



FEB 02 2017

DQA: _____ Date: _____



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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																		
Description Work Order Deviation				Disposition																					
Root Cause		FAULT CATEGORY																							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																				
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								

Picklist Print

Wednesday, December 21, 2016 11:55:00 AM

Page 1

Work Order ID: 154780

154780

Parent Item: D3847-1

D3847-1

Parent Item Name: Wearpad

Start Date: 12/16/2016

Required Date: 12/21/2016

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP RevA: New issue DD verified by:EC
14.11.25 AS PER DWG REV.C DD VERF:JLM IPP REV:C 16.03.31
AS PER DWG REV.D DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA		Purchased	No			100	sf	140.4700	0.1236	1.301053			

M304S16GA

304/316 Sheet .063

on 11/12/22

Location

Loc Qty

Loc Code

MAT010

140.47

m134604

8.6

m136036

34.97

m136327

96.9

1.6

DQA: _____ Date: _____

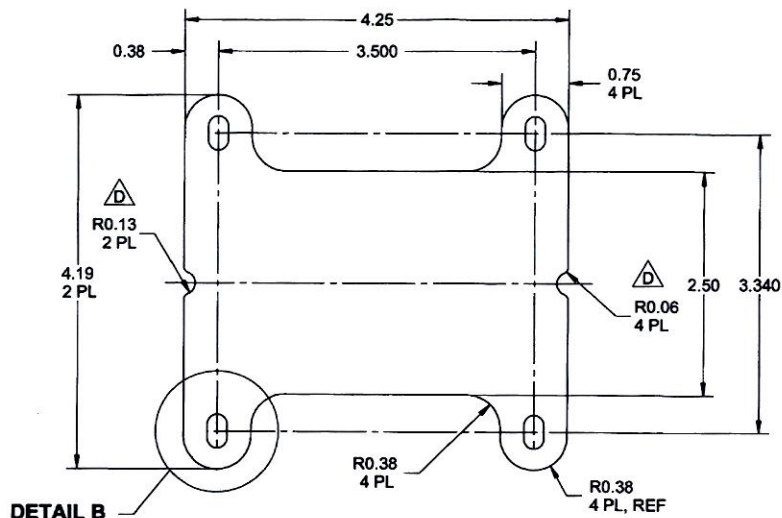


WORK ORDER NON-CONFORMANCE / UPDATE

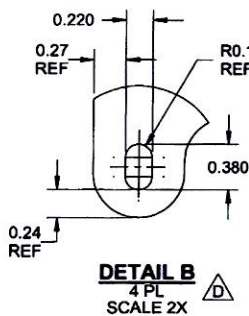
QA Closed: _____ Date: _____

Work Order update only ☐

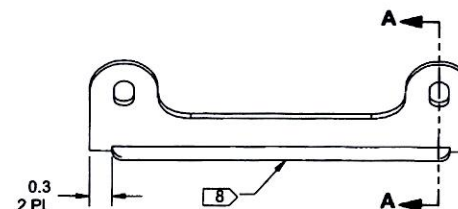
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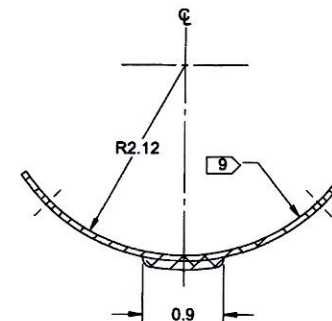
D3847-1F WEARPAD
(FLAT PATTERN)



DETAIL B
4 PL
SCALE 2X



D3847-1 WEARPAD
(MAKE FROM D3847-1F)



SECTION A-A

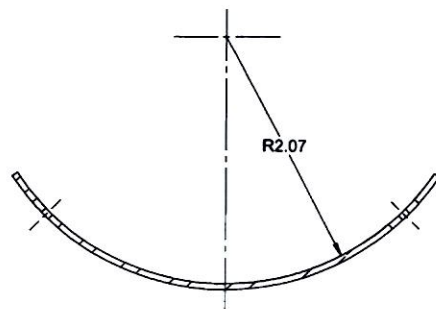
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 154780 MWS
1612-21

D	UPDATE NOTES FOR AUTOMATED WELDING. UPDATE CURRENT DRAWING STANDARDS AND TOLERANCES. REMOVE FINISH. ADD TEXTURED COATING NOTE. UPDATE MATERIAL NOTES. -3F, -5F, -7F & -9F SIDE VIEW REMOVED. 3B7, 7B2, 7B1 REMOVED 0.080 DIMENSION. DB1, DB1, 8C7, 8C5, R0.13 TOOLING NOTCHES ADDED. ACCORDINGLY 8C2, 0.2 DIM WAS 0.05 (MANUFACTURING REQUEST).	AJS	15.09.28
C	REMOVED D3846-3/-5/-7/-9 GASKETS, ZN D2-1. ADDED TEXTURED COATING, ZN B3-1. UPDATED WEIGHTS, ZN C3-1/AS-2	AK	14.08.06
B	CORRECT TYPO D3847-047 WAS D3847-045. ZN B5-1; 5.82 WAS 6.25 (ZN A4-2); 45.28 WAS 45.71 (ZN B4-5)	RF	09.06.30
A	NEW ISSUE	RF	09.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	AJS		
CHECKED	ML	DRAWING NO.	REV. D
MFG. APPR.	DD	D3847	SHEET 1 OF 7
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WEARPLATE ASSY	NTS
DATE	15.09.28	COPYRIGHT © 2009 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE REPRODUCED FOR ANY PURPOSE OR COME OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

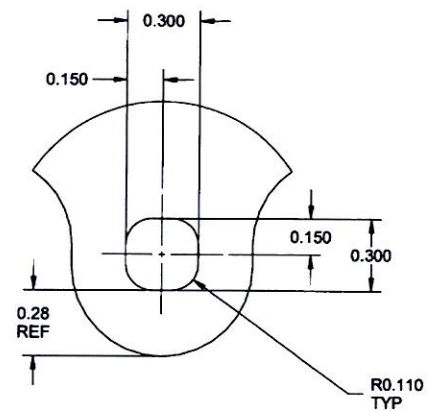
- NOTES:**
- 1) MATERIAL -1F: AISI 304/316 STAINLESS STEEL 16 GAUGE 0.063 THICK PER MIL-S-5059 OR AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240 REF DART SPEC. M304S16GA
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
 - 7) WEIGHT: 0.23 lbs
 - 8) BUILDUP HARD SURFACING 0.17 TO 0.20 THICK USING 8259 ROD PER QSI 004 SECTION 4.5 (AUTOMATED WELDING) OR BUILDUP HARD SURFACING 0.19 TO 0.25 THICK USING 2059B ROD PER QSI 004 SECTION 4.1 (MANUAL WELDING)
 - 9) COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING 0.02-0.04 THICK, PER DART QSI 005 4.9

RELEASED
2016-03-31
EN 16-554

APPROVED



SECTION C-C
SCALE 4X
C3-2
C4-3
C3-4
C2-5



DETAIL D
SCALE 4X
B5-2
B6-3
B3-4
B4-5

RELEASED
2016-03-31

APPROVED
DS

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	AJS	EUGENE, OR	
CHECKED	ML	DRAWING NO.	REV. D
MFG. APPR.	DD	D3847	SHEET 7 OF 7
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WEARPLATE ASSY	NTS
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